MONMOUTH UNIVERSITY

where leaders look forward℠

CAPer

A CAP MESSAGE AUTHORING
TOOL

CAPer@monmouth.edu

RAPID RESPONSE INSTITUTE

MU

PREVENT ★ PROTECT ★ RESPOND ★ RECOVER

CAPer CONTEXT/OVERVIEW

- TOOL FOR CREATING CAP MESSAGES CREATED AS PART OF A FEDERALLY FUNDED PROJECT AT MONMOUTH UNIVERSITY IN ITS RAPID RESPONSE INSTITUTE

- THE DYNAMICALLY ENHANCED COMMAND INFORMATION DELIVERY (DECIDE) PROJECT

- DECIDE IS A VISUALIZATION PROJECT WITH PROTOTYPING OF THE DISPLAY WIDGETS BASED ON A PROTOTYPE ARCHITECTURE

- CAP WAS USED AS THE DATA MESSAGING MECHANISM THROUGHOUT

- BUILT BY A MONMOUTH UNIVERSITY COMPUTER SCIENCE STUDENT: ALEX KARPODINIS

- GUIDANCE FROM DECIDE'S PRINCIPAL INVESTIGATORS: ROBERT M KELLY JR AND ALLEN MILEWSKI, PROFESSORS FROM THE MONMOUTH UNIVERSITY SOFTWARE ENGINEERING DEPARTMENT

- CAPer CONFORMS TO OASIS CAP V1.1 STANDARD

- DECIDE MADE USE OF OPTIONAL FIELDS BUT CAPer ITSELF IS USE-AGNOSTIC EXCEPT FOR SYNTAX VALIDATION

CAPer DEVELOPMENT METHODOLOGY

- "LIGHT-WEIGHT" – CONSISTENT WITH OVERALL ITERATIVE PROTOTYPE DEVELOPMENT APPROACH

- JAVA

- 12 BUILDS OVER 3 MONTHS MOSTLY FOR UI IMPROVEMENT AND BUG REMOVAL

- RELEASE NOTES AND README FILES

- REQUIREMENTS THROUGH E-MAIL AND VERBAL COMMUNICATIONS

- DECIDE PROJECT SIZE: 2 RESEARCHERS, 4 STUDENTS

- 2-4 CAPer USERS

CAPer Features

- SAVE, LOAD, PRINT

- TEMPLATE FUNCTIONALITY

- TOOL TIPS WITH CAP 1.1 USAGE FOR ALL TAGS

- STATUS BAR SHOWS CURRENT XML FILE AND TEMPLATE FILE

- PREVENTS XML SYNTAX ERRORS AND SOME CAP SYNTAX ERRORS

- SOME MUTLI-INSTANCE TAGS MANAGED BY NUMBERED BUTTONS

- RESTRICTED VALUE TAGS MANAGED BY DROP-DOWN MENUS

- REQUIRED CAP TAGS HAVE A BLUE ALIAS

Implementation Detail

- USES OASIS' JAVA LIBRARY FOR CAP 1.1 FOR XML PARSING

- 4450 LINES OF CODE OVER 10 CLASS FILES

- CODED IN JAVA 5

- DEVELOPED USING THE ECLIPSE INTEGRATED DEVELOPMENT ENVIRONMENT

- ITERATIVE DEVELOPMENT WITH USER INPUT

- PROTOTYPE: ROOM FOR IMPROVEMENT

CAPer NEXT STEPS

- CAPer V1.1 TO BE WEB-BASED VIA THE MONMOUTH UNIVERSITY RRI WEB PAGE
  - ALLOW RESTRICTED USE OF THE TOOL AND FEEDBACK ON ITS CAPABILITIES
  - AVAILABLE CIRCA JUNE 1

- CAPer V1.2 TO BE AN OPEN SOURCE TOOL PROBABLY THROUGH SOURCEFORGE.NET
  - ALLOWS FULL USE
  - AVAILABLE CIRCA JULY 1

- EDUCATIONAL VERSION OF CAPer TO BE CREATED BASED ON FUNDING

- CONTACT WITH COMMENTS OR QUESTIONS
  - CAPer@monmouth.edu